

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A network connection system comprising:

 a client apparatus;

 an authentication server; and

 a connection server, wherein:

 the authentication server includes:

 a retention unit for storing second connection authentication information ~~prepared generated on the basis of by the connection server based on first connection authentication user identification information used in the connection server while associating and associating~~ the second connection authentication information with a connection server address; ~~address of the connection server;~~

 a first unit for acquiring ~~user identification~~ the second connection authentication information from the client apparatus and a client address ~~of the client apparatus~~ when the first unit receives a connection request from the client apparatus; and

 a second unit for transmitting the ~~acquired~~ client address to ~~the connection server having~~ the connection server address associated with the second connection authentication information ~~acquired by the first unit~~ and transmitting the connection server address to the client apparatus, ~~which has transmitted the connection request;~~

 the client apparatus includes:

 a third unit for transmitting the second connection authentication information to the authentication server ~~as the user identification information together with the connection request;~~

a fourth unit for receiving the connection server address from the authentication server; and

a fifth unit for preparing the first connection authentication information based on the user identification information and transmitting the first connection authentication information to the connection server address of the connection-server having the received connection server address; and server; and

the connection server includes:

a sixth unit for receiving allowing the first connection authentication information to be received from the client address, which has been address which is received from the authentication server; and

a seventh unit for performing an authentication process by using the first connection authentication information transmitted from the client address.

2. (Original) The network connection system according to claim 1, wherein the second connection authentication information is a message digest of the first connection authentication information.

3. (Currently Amended) An authentication server for being connected to a plurality of client apparatus apparatuses and a plurality of connection server, servers, the authentication server comprising:

a retention unit for storing second connection authentication information prepared generated on the basis of based on first connection authentication user identification information used in the connection server while associating and associating the each second connection authentication information with a connection server address of the corresponding connection server;

a first unit for acquiring ~~user identification~~the second connection authentication information from the client apparatus and a client address when the first unit receives a connection request from the client apparatus; and

a second unit for transmitting the acquired client address to the connection ~~server~~server, having address of the connection server ~~address~~ associated with the acquired second connection authentication ~~information~~information, and transmitting the connection server address to the client apparatus, ~~which has transmitted the connection request~~apparatus which has transmitted the connection request.

4. (Canceled)

5. (Currently Amended) A connection server ~~for being connected to operating~~ with an authentication server and a client apparatus, the connection server comprising:

a control unit for receiving a client address of the client apparatus from the authentication server after the authentication server authenticates information received from the client address and allowing connection authentication information to be received from the client address; and

an authentication unit for ~~receiving~~receiving the authentication information from the client apparatus having the client address, ~~which is allowed the connection, address~~ to perform an authentication process by using the authentication information.

6. (Currently Amended) A network connection system comprising:

a client apparatus;

an authentication server; and

a connection server, wherein:

the authentication server includes:

a retention unit for storing a first encrypted user name and a first encrypted password, which are encrypted by a first encryption method, ~~while and for~~

associating a connection server address of the connection server with the first encrypted user name and the first encrypted password;

a first unit for acquiring the first encrypted user name and the first encrypted password ~~as identification information for identifying a user of the client apparatus,~~ and a client address when the first unit receives a connection request from the client ~~apparatus; and apparatus, the first encrypted user name and the first encrypted password being an identification information for identifying a user of the client apparatus; and~~

a second unit for transmitting the acquired client address to the connection server address associated with the user identification information ~~when the retention unit stores the user identification information~~, receiving from the connection server information indicating that the connection server ~~is shifted~~ ~~has shifted~~ to a connection wait state, and transmitting the connection server address to the client ~~apparatus, which issues the connection request; and apparatus, and~~

the client apparatus includes:

a third unit for transmitting to the authentication server the first encrypted user name and the first encrypted password, which are encrypted by the first encryption method, together with the connection request; and

a fourth unit for receiving the connection server address from the authentication server, and transmitting to the ~~received~~-connection server address a second encrypted user name and a second encrypted password, which are generated by encrypting using a second encryption method a user name and a ~~password, which are password~~ input by ~~the user, by a second encryption method. the user.~~

7. (Currently Amended) An authentication server for ~~being connected to~~ ~~operating with a plurality of client apparatus~~ ~~apparatuses~~ and a ~~plurality of connection server~~, ~~servers~~ the authentication server comprising:

a retention unit for storing a ~~user name~~ ~~names~~ and a ~~password~~ ~~passwords~~, which are encrypted by a predetermined method, ~~while and associating the~~ ~~each~~ user name and ~~the~~ ~~each~~ password ~~are associated with a connection server address of a corresponding connection server;~~

a first unit for ~~acquiring the~~ ~~acquiring an acquired~~ encrypted user ~~name and the name, an acquired~~ encrypted ~~password, password as identification information for identifying a user of the client apparatus, and a~~ ~~an acquired~~ client address when the first unit receives a connection request from the client apparatus, ~~and apparatus, the~~ encrypted user name and ~~password being an identification information of a user of the client apparatus; and~~

a second unit for transmitting the acquired client address to the connection server address associated with ~~the acquired encrypted user name and password, the user identification information when the retention unit stores the user identification information, receiving from the connection server information indicating that the connection server is~~ ~~server has shifted to a connection wait state, and transmitting the connection server address to the client apparatus, which issues~~ ~~has issued~~ the connection request.

8. (Canceled)

9. (Currently Amended) ~~The client apparatus according to claim 8, further comprising:~~ A client apparatus operating with an authentication server and a connection server, the client apparatus comprising:

~~a connection request unit for transmitting to the authentication server a connection request and a user name and a password which are encrypted by a first encryption method;~~

a receiving and transmitting unit for receiving a connection server address from the authentication server, encrypting by a second encryption method the user name and the password input by a user, and transmitting the encrypted user name and password to the connection server address;

a retention unit for storing local authentication information, which is previously supplied from the connection server, as information the local authentication information associating unique information of the client apparatus with at least one of the user name and the password; and a user name and a password previously provided to the connection server; and

a local authentication unit for generating the unique information upon receiving inputting the based on a user name and the password by the user, references the local authentication information to authenticate password input by the user, and authenticating the user name and the password input by the user by judging based on the local authentication information whether or not at least one of the received user name and the received password input by the user is associated with the generated unique information, wherein:

the connection request unit transmits to the authentication server the connection request and the user name and the password, password which are encrypted by the first method, together with the connection request only when method only when the user name and the password input by the user are authenticated by the local authentication unit, unit authenticates the user.

10. (Currently Amended) A connection server for being connected to operating with a client apparatus and an authentication server, the connection server comprising:

a unit for receiving a control unit that receives from the authentication server an address of the client apparatus to be connected from the authentication server, allowing

and allows communication from the address of the client apparatus for a predetermined period, and period; and

a transmitting unit that transmits transmitting to the authentication server information indicating that the connection server is-shifted has shifted to a connection wait state.

11. (Currently Amended) A network connection system comprising:

a client apparatus;

an authentication server for supplying information guiding a connection destination to the client apparatus; and

a connection server, ~~wherein:~~wherein the client apparatus:

~~the client apparatus calculates first authentication information unique to the client apparatus to register the first authentication information in the connection-server preliminarily, and acquiring server, acquires local authentication information from the connection server, the local authentication information associating the first authentication information with a predetermined second authentication information from the connection server to store and second authentication information with the predetermined authentication information, and stores~~ the local authentication information;

~~the client apparatus receives input of the receives second authentication information when a input by a user when the user instructs a connection request with respect to the connection server, again calculates the first authentication information unique to the client apparatus again, looking into an association between the input apparatus, authenticates the second authentication information and the again calculated first authentication information by using based on the stored local authentication information, encrypting and if authentication is successful, encrypts the second authentication information by a first encryption method to transmit and transmits the encrypted second authentication information~~

to the authentication server; and ~~server the second authentication information encrypted by the first encryption method when it is concluded that the association is established; and~~

~~the client apparatus receives the receives from the authentication server a connection server address as the information guiding the connection destination from the authentication server, transmitting of the connection server, transmits to the connection server address the second authentication information encrypted by a second encryption method to a connection server address, and starting and starts a communication with the connection server.~~

12. (Currently Amended) A connection method using a network connection system including a client apparatus, an authentication server, and a connection server, the method comprising:

~~storing by storing in the authentication server second connection authentication information prepared generated on the basis of by the connection server based on first connection authentication information used in the connection server while information;~~

~~associating the second connection authentication information with a connection server address; address of the connection server;~~

~~transmitting by the client apparatus to the authentication server the server a second connection authentication information as user identification information together with a connection request;~~

~~acquiring a client address and the user identifying information from the client apparatus and client address when the authentication server receives the connection request from the client apparatus;~~

~~transmitting the acquired client address to the connection server identified by the connection server address of the connection server associated with the second connection~~

~~authentication information when the user identification information meets is authenticated based on the second connection authentication information;~~

transmitting the connection server address to the client ~~apparatus; apparatus, which issues the connection request;~~
receiving by the client apparatus the connection server address from the authentication server;

transmitting by the client apparatus ~~the first a first~~ connection authentication information to the ~~received~~ connection server address;

receiving by the connection server ~~the first~~ connection authentication information from the client address; ~~and address received from the authentication server; and~~
performing an authentication process by using the first connection authentication information transmitted from the client address.

13. (Currently Amended) A connection method using a network connection system including a client apparatus, an authentication server, and a connection server, the method comprising:

storing by the authentication server a user name and a ~~password, password~~
which are encrypted by a first encryption ~~method; method, while~~

~~connection server address; a connection server address of the connection server;~~
associating the encrypted user name and the encrypted password with

transmitting by the client apparatus to the authentication server ~~a connection request and the user name and the password, password~~ which are encrypted by the first encryption ~~method; method, together with a connection request;~~

receiving by the authentication server the connection request from the client apparatus;

acquiring a client address of the client apparatus and the user name and the password, which are encrypted by the first encryption method, as information identifying a user of the client-apparatus, ~~and a client address; apparatus;~~

transmitting the ~~acquired~~ client address to the connection server ~~address associated with the information identifying the user when the authentication server stores the information identifying the user;~~ address;

receiving by the connection server the ~~client address of the client apparatus to be connected from the authentication server;~~ address;

allowing communication from the client apparatus;

transmitting to the authentication server information indicating that the connection ~~server is~~ ~~server has~~ shifted to a connection wait state;

encrypting using a second encryption method a user name and a ~~password, which are~~ ~~password~~ input by the user, ~~by a second encryption method;~~ a user;

transmitting to the connection server address the user name and the ~~password, password~~ which are encrypted by the second encryption method, ~~to the connection server address received by the client server from the authentication server;~~ and method; and

performing an authentication process by using the user name and the ~~password, password~~ which are encrypted by the second encryption method and are received by the connection server from the client apparatus.